# Innovators' Guide

Steps and Resources to Help You with the Innovation Process

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An affiliate of the NUST Manufacturing Extension Partnership

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### **GREETINGS**

# Do you have an innovative concept or product? Are you trying to achieve commercial success for it?

Montana state service providers get many requests for assistance from independent inventors and small businesses with new concepts they hope will succeed in the marketplace. Service resources are very limited and each organization can provide assistance only in their area of primary focus.

Therefore, before you can expect others to invest time or money in your concept, it is critically important that you take steps to:

- protect and develop your concept or product
- educate yourself about the innovation process
- learn if your innovation is feasible to achieve sales in the proposed market

This simple Innovators' Guide is in no way comprehensive, and you will want to dig more deeply into the resources referenced. Please understand clearly that Montana service organizations are NOT in the business of helping companies to find investors. At times, they can connect you to financial opportunities; however, be prepared – the application processes are highly competitive and require excellent writing skills.

Yours may well be among the small percentage of ideas that become successful. Or, your inventing may be nothing more than a fun and satisfying hobby. In either case, the information provided here will guide you in critical steps of innovation and commercialization.

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#### **CONFIDENTIALITY**

It is important you don't share details about your invention publicly before your patent is filed. This isn't just to prevent someone from stealing your idea. When you "disclose" your invention, or make it "public," it starts a grace period in which you have one year to file a patent application, or you lose your right to monopolize the idea. Making an invention public might be something obvious like telling a crowd of friends at the coffee shop how to build and use your product or describing these details in your blog. Or, it might be less obvious like making a prototype and using it for your work on a commercial job.

At times, it is necessary to discuss details of the invention in order to market it or advance the development process. In those situations, ask the other party to sign a Confidentiality Agreement (also known as a Non-Disclosure Agreement). You can find sample agreements by searching online or by requesting a template from your patent attorney (a patent agent may not provide you with legal agreements).

The best behavior is to share the 'enabling' details (those details that would allow someone moderately skilled in the field to practice your invention) ONLY with those parties who absolutely must have that information to interact with you. It is not necessary to reveal enabling details in order to provide significant information to another party. Non-confidential information can include the type of product, the problem to be solved, the industry and market sectors, and the benefits of your invention.

Take efforts to learn how to talk about your invention non-confidentially while keeping patentable information to yourself until the patent is filed. Develop a simple one-page technology brief or 'sell sheet' to identify what you can reveal non-confidentially. It should state the problem being solved and the benefits of your invention solution. Add a graphic that will allow the reader to quickly understand your field of interest without seeing your invention, and don't forget to include your name and contact information. In addition to disciplining yourself in how to speak about your innovation, this print piece will allow you to rapidly introduce your concept to service providers and others.

# INVENTION RECORDS

If you ever expect to make money from your innovation, you need to think and act like a business person. Keep good files and records on all of your effort, starting with an invention journal or diary on the development of your invention.

In March 2013, the United States will join most other countries in giving credit for an invention to the first inventor filing a patent on it. Therefore, an invention logbook no longer has quite the legal importance it once had when inventorship was based on documentation of being the first-to-invent. Nonetheless, your cumulative logbook or journal can be an important augmentation to memory when filing and prosecuting your patent. It should include all the details of your invention reduction to practice which is an essential requirement of patenting and which can be valuable in a patent interference proceeding. An invention log contains notes describing the development of your invention, including sketches, changes, test results, materials used – everything! Future collaborators, investors, and licensing interests also may benefit from the insight into your invention development process.

Other vital records include a master file of all Confidentiality Agreements you have executed, material supply records and correspondence, as well as good documentation of contacts you make and what information is provided to each. This recordkeeping ensures impeccable follow-up with prospective licensees and others. It also will permit you to follow through if confidentiality provisions have been violated.

Check out the U.S. Patent & Trademark Office (USPTO) for FAQs on patenting: <a href="https://www.uspto.gov/inventors">www.uspto.gov/inventors</a>

# **INVENTION EVALUATION**

It is highly recommended that you collect abundant information before incurring the costs of prototyping, patenting, and marketing your innovation. It is critical that you make every effort to evaluate the feasibility of your invention from many different perspectives.

Your invention evaluation process should examine:

- Legality
- Safety
- Impact on society
- Performance
- Profitability
- Market demand
- Size of market
- Product-line potential
- Manufacturing feasibility
- Distribution channels
- Competition and bordering products
- Competitive advantages and disadvantages
- Consumer appeal
- Licensing potential
- Major barriers toward market or manufacturer acceptance

Be aware that the results you get from evaluations by service providers are only as good as the input you provide. If you don't have a strong basis for an answer, collect more information before requesting feedback. You are likely to invest vast quantities of personal time and thousands of dollars in your invention. It is important to approach the process knowledgeably and with high-quality outside feedback. Following are details about two university-based innovation assessment services that can provide an objective third-party evaluation of your invention. *A simple, self-administered evaluation test is at:* www.uspatentlaw.com/evaluation.htm

#### WASHINGTON STATE UNIVERSITY INNOVATION ASSESSMENT CENTER

Transforming ideas into products; shaping products into opportunities. The Washington State University Center for Innovation and Value Creation (IAC) helps independent inventors and small business owners understand the economic impacts of their innovations. The University Center provides a service to evaluate the potential for commercial success of new products, services, or processes. Our goal is to transform and promote ideas into products and, in turn, shape these products into opportunities.



IAC staff works to discover the feasibility of ideas and to advise innovators on how they can turn their best ideas into products. For more than two decades, the IAC has provided evaluation services to individuals and small businesses from across the United States in the form of a feasibility assessment. This assessment is a comprehensive evaluation of ideas for new products and/or services and how these would survive in actual markets facing real competition. The assessment provides individuals with critical information about what decisions to make regarding their ideas – do they invest more, make modifications, or begin with a new idea? The evaluation costs \$795, a small fee compared to a much more costly decision made without market estimation or competitive analysis.

So how does the Assessment work? It starts with an idea – your idea.

An innovator completes a confidential registration and disclosure document, and the idea is reviewed by the IAC staff. Research into market size, the competitive landscape, and intellectual property begins. The assessment also includes reviews from no fewer than three experts. These outside experts ask and apply the following questions to the new idea: Who is the customer? How large is the market? Is there intellectual property to protect? How much competition is there? Are there existing barriers to entry? And probably the most critical question of all: Do experts see market viability for this idea? After all of these important questions have been asked and answered, the IAC can advise the innovator to move ahead with their idea or to redesign it. A report of the detailed analysis and the evaluators' specific comments are sent to the innovator for their review. The IAC and University Center staffs are then available for further consulting if the innovator decides to pursue a well-rated project.

Contact the IAC to consult about your product and for additional information about our services. <a href="https://www.business.wsu.edu/organizations/jac/Pages/index.aspx">www.business.wsu.edu/organizations/jac/Pages/index.aspx</a>

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#### UNIVERSITY OF WISCONSIN INNOVATION SERVICE CENTER

The Wisconsin Innovation Service Center (WISC) helps manufacturing clients from across the U.S. with new product and market decisions. WISC provides small businesses with early-stage technical and market feasibility assessments of new product and service ideas, as well as with investigating market expansion opportunities.



WISC researchers use an extensive array of resources to gather information on market size, competitive intensity, existing patents, and demand trends, permitting clients to make well-informed decisions on the further development of projects or markets. WISC's unique competence lies in access to a network, built up over the years, of technical and specialized consultants with a variety of expertise, as well as maintenance of an in-house staff capable of performing quality secondary market research. Since 1980, WISC has served thousands of clients, from across the U.S. and several foreign countries.

WISC charges an \$895 flat fee for a basic report. Higher fees are quoted for more in-depth projects. Somewhat lower fees are sometimes available for clients with less than \$1 million in sales.

Wisconsin Innovation Service Center 402 McCutchan Hall University of Wisconsin—Whitewater Whitewater, WI 53190 (262) 472-1365 innovate@uww.edu http://academics.uww.edu/business/innovate/

#### PATENTING BASICS

A patent is granted by the government and given only to the inventor or discoverer of a new and useful process, machine, article of manufacture, or composition of matter. A patent grants the owner a monopoly on one invention, with rights to exclude all others from making, using, selling or offering for sale the invention for approximately 20 years.

To be patentable, an invention must be:

- Novel (not previously known or described in a publication);
- <u>Useful</u> (incorporates a useful purpose and is not frivolous or immoral); and
- Non-obvious (not obvious to a person with ordinary skill in the relevant area of knowledge)

A patent cannot be obtained on an abstract idea, a law of nature, or a natural phenomenon. The invention must be set forth in all the detail that would allow it to be duplicated by a person with ordinary skill in that field.

A patent will not be granted if (among other things) the invention was already patented, if it was described in a printed publication anywhere else in the world, if the invention was made available for

public use or sale in the U.S. prior to the 12 months before filing, or if the inventor's application for a patent in another country was granted before the filing date of the U.S. application.

A preliminary patentability search is important to determining whether an invention is novel and to aid registered patent counsel or the inventor in drafting the patent application. The government thoroughly examines for patentability. Present backlogs in the U.S. Patent and Trademark Office (USPTO) may prevent examination of a new patent application for 24 to 30 months. Therefore, it may take several years before a patent is issued.

A Provisional Patent Application (PPA) allows an inventor to claim "patent pending" status for the invention for 12 months, but involves less work and cost than a Regular Patent Application. A PPA allows the inventor a year to develop and market the invention under patent-pending protection. For far less than the full price of a U.S. Regular (Non-Provisional) patent, you can establish your inventorship claim while continuing to investigate your invention. Before the end of the year, you must decide whether to file the U.S. Regular Patent Application.

Search for more patent information at the USPTO website (<u>www.uspto.gov</u>). The USPTO Inventors Resources site at <u>www.uspto.gov/web/offices/com/iip/index.htm</u> includes instructions, assistance and links to valuable information for new inventors. General information may be requested by calling the USPTO at (800) 786-9199.

# **OBTAINING A PATENT**

The World Intellectual Property Organization distributes a FREE handbook about the patenting process. "Inventing the Future" is written in easy-to-read language and is at: <a href="https://www.wipo.int/freepublications/en/sme/917/wipo\_pub\_917.pdf">www.wipo.int/freepublications/en/sme/917/wipo\_pub\_917.pdf</a>

Following are the typical steps in pursuing a patent:

- 1. Look for similar products in stores and on the Internet to develop an understanding of the market opportunity or need for your invention.
- 2. Review publications, articles, and technical literature to find out how the problem you have identified is currently being solved. Become knowledgeable about the problem and the estimated costs of your solution as opposed to those already available.
- 3. Do an initial search online at <a href="https://www.uspto.gov/patft/index.html">www.uspto.gov/patft/index.html</a>, by going to a Patent Depository Library (one is located in Butte, MT), or by hiring a qualified search agent (most easily located through a patent attorney or agent).
- 4. Arrange a first consultation with a patent attorney or a patent agent qualified in your field of inventing and with whom you can communicate well. This individual must be registered with the USPTO, which you can verify by searching at <a href="https://oedci.uspto.gov/OEDCI/">https://oedci.uspto.gov/OEDCI/</a>.
- 5. Clearly understand the costs and expectations of patent counsel before deciding on a patent strategy and making a deposit for services.
- 6. Prepare an invention disclosure and patent application interactively with patent counsel.
- 7. Cooperate with your patent counsel on a professional patent search (if needed), forms completion, and the creation of patent-ready illustrations.
- 8. File the application getting a patent application number makes your invention "patent pending."
- 9. Work with your patent counsel to respond to the patent examiner's 'Office Action' in which your claims are allowed, disallowed, or challenged.
- 10. Be patient today's patent process moves slowly and may require two years or more before an examiner looks at your application. There may be more than one Office Action until the patent is in a form that can be allowed for issuance.

A preliminary approach to patent searching is described in an article on MTIP's website at: <a href="https://www.mtip.mt.gov/content/docs/PatentSearching.pdf">www.mtip.mt.gov/content/docs/PatentSearching.pdf</a>

#### THE LIBRARY AT MONTANA TECH



The library at the Montana College of Mineral Science and Technology (Montana Tech) in Butte is a U.S. Patent Depository Library. Through it, you can access descriptions of over four million U.S. patents and gain easy access to full patents back to 1959. Reference personnel at the library will help you initiate a search to find out if an invention is unique. However, you should be prepared to spend many hours, perhaps a couple days, reviewing descriptions in the related categories. This effort may save hundreds of dollars. For more information, call the library at (406) 496-4281 or visit it online at <a href="https://www.mtech.edu/library/">www.mtech.edu/library/</a>

# MONTANA STATE UNIVERSITY

#### THE LIBRARY AT MONTANA STATE UNIVERSITY-BOZEMAN

Reference personnel at Renne Library, MSU-Bozeman will help you initiate a patent search. Library personnel also have search access to over 450 electronic databases, including patent databases, as well as access to other commercial online systems. Handouts that explain the service and fees are available at the library. Online commercial search request forms are also available at the library and in electric format for those with Internet access: <a href="www.lib.montana.edu/ref/">www.lib.montana.edu/ref/</a>. For more search information, call (406) 994-3171.



#### THE LIBRARY AT UNIVERSITY OF MONTANA, MISSOULA

The Maureen and Mike Mansfield Library offers patent-search features similar to those at MSU-Bozeman. This library also carries the Official Gazette, which contains abstracts of patents. For more information contact the Document Division at (406) 243-6866 or (800)240-4939, or online at <a href="https://www.lib.umt.edu">www.lib.umt.edu</a>.

### PAMPHLETS & BOOKS

The following are valuable self-help reference guides that can be ordered from Nolo Press, Berkeley, CA, at (800)728-3555 or online at <a href="www.nolo.com/products/intellectual-property/patent-books">www.nolo.com/products/intellectual-property/patent-books</a>.

<u>Patent Searching Made Easy</u> by David Hitchcock How to do patent searches on the Internet and in the library.

*Nolo's Patents for Beginners* by Nolo Press A basic reference primer for first time inventors.



#### Patent Savvy for Managers by Kirk Teska

How to spot and protect your company's innovations.

#### Patent It Yourself by David Pressman

Understanding the invention process including how to get started, maintaining an invention log, the forms and instructions necessary to patent your invention in the U.S., marketing your invention, attracting investors, and more.

#### Patent Pending in 24 Hours by Richard Stim and David Pressman

The forms and basic information for filing a U.S. provisional patent application.

#### Profit from Your Idea by Richard Stim

Practical marketing advice and the legal language necessary to making smart licensing decisions.

# **ONLINE RESOURCES**

#### INTELLECTUAL PROPERTY

U.S. Copyright Office	www.copyright.gov
Copyright Information and Fair Use	www.benedict.com/info/info.aspx
U.S. Patent & Trademark Office	www.uspto.gov
World International Patent Organization	www.wipo.org

#### **INVENTOR ORGANIZATIONS**

United Inventor's Association of America	www.uiausa.org
American Society of Inventors	www.americaninventor.org

#### OTHER INVENTOR INFORMATION

Inventor's Digest - the only U.S. inventors magazine	www.inventorsdigest.com Subscriptions: (800) 838-8808		
License Marketing Firms (Good Guys™)	www.inventorfraud.com		
Invention Disclosure	www.webpatent.com		
Invention Promotion Industry	www.uspto.gov/web/offices/com/iip/complaints.htm		
Federal Trade Commission - fraud	www.ftc.gov/bcp/edu/pubs/consumer/products/pro21.shtm		
Trademark Information	www.uspto.gov/trademarks/basics/index.jsp		
Great Idea Gear - A Montana online bookstore for innovators	www.greatideagear.com		

# MONTANA TECHNOLOGY INNOVATION PARTNERSHIP (MTIP)

MTIP provides free counseling from consultants knowledgeable and well-experienced with the process of moving innovation into the marketplace. MTIP's program staff and consultants will help you determine the needs of the company and assist by offering technical assistance to guide you through the innovation process. For more information visit <a href="https://www.mtip.mt.gov">www.mtip.mt.gov</a>, call (406) 841-2749.



#### SMALL BUSINESS DEVELOPMENT CENTER NETWORK

Small Business Development Lead Center Montana Department of Commerce 301 South Park PO Box 200505 Helena, MT 59620-0505 (406) 841-2747 www.sba.gov and www.sbdc.mt.gov Starting, managing, and financing your small business



SBDC at Big Sky Economic

Development Authority

222 North 32<sup>nd</sup> Street, Suite 200

Billings, MT 59101-1911

406-254-6014

SBDC at Bear Paw

Development Corporation
48 2<sup>nd</sup> Avenue, Suite 202

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SBDC at Montana Community

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222 East Main Street, Suite 202 225 Cruise Ave.

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406-728-9234 x 250 406-447-1510

SBDC at Headwaters

RC&D Area, Inc.

65 East Broadway

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406-782-7333

SBDC at Flathead Valley

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